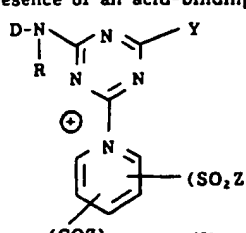
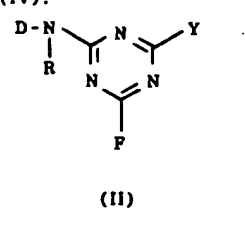
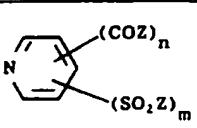


<p>91-088292/13 A20 E23 F06 (E21) <b>PARS 16.09.93</b>  <b>BAYER AG</b>  16.09.89-DE-930996 (27.03.91) C09b-62/04  <b>*EP -418-623-A</b>  Reactive dyestuff prodn. by introducing cationic pyridino gp. into s-triazinyl-amino dyestuff cpd. for dyeing and printing e.g. cotton and polyamide  C91-037486 RICH DE FR GB LI)</p>	<p>A(3-A5, 5-F1D, 8-E3, 12-S5H) E(21-D1, 21-D8, 25) F(3-F3, 3-F6, 3-F19, 3-F22)</p>
<p>Prodn. of reactive dyestuffs of formula (I) having a cationic 4-pyridino-s-triazin-2-yl-amino substat. Involves reacting a 4-fluoro-s-triazin-2-yl-amino-substd. dyestuff of formula (II) with a pyridine cpd. of formula (III) in the presence of an acid-binding agent (IV).</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>(I)</p> </div> <div style="text-align: center;">  <p>(II)</p> </div> </div>	<div style="text-align: center;">  <p>(III)</p> </div> <p>D = the radical of inorganic chromophore;  R = H or 1-4C alkyl;  n and m = 0, 1 or 2 with m + n = max. 2;  Y = a substat. which is not fibre-reactive;  Z = OH, OR<sub>1</sub>, NR<sub>2</sub>R<sub>3</sub> or OM;  M = an alkali(ne earth) metal, esp. Li, Na or K;  X<sup>-</sup> = the anion of a mono- or polybasic (in)org. acid;  R<sup>1</sup> = opt. substd. 1-4C alkyl;  R<sub>2</sub> and R<sub>3</sub> = H or R<sub>1</sub>; or NR<sub>2</sub>R<sub>3</sub> = a 5- or 6-membered heterocycle.</p> <p><b>USE/ADVANTAGE</b>  (I) are useful for dyeing and printing natural and synthetic materials contg. OH or amide gps., esp. cellulose and polyamides. They are esp. suitable for dyeing</p> <p style="text-align: right;">EP-418623-A+</p>

cellulose materials by the exhaustion and alop padding cold dwell technique and for printing cotton and staple rayon. Good build-up, high fixing yields and good fastness, esp. wet fastness, are obtd.

#### ALSO CLAIMED

The claims also cover aq. solns. with pH 4-9, pref. 6-8, contg. 2-50 esp. 5-30 (wt.%) (I), 0-1, pref. 0-0.5% inorg. neutral salt, 0-40% water-miscible org. solvent (V) and opt. other conventional additives (VI), e.g. buffers.

#### PREFERRED CONDITIONS

Reaction is carried out in aq. or aq.-org. medium at 40-140, pref. 60-90°C and pH 4-10, pref. 6-8. The aq. (I) solns. are prepd. by reacting (II), opt. in the form of aq. solns. or dispersions obtd. by coupling or condensation, with (III) in aq. or aq.-org. medium, followed by pressure permeation. (V) and opt. (VI) may be added before, during or after permeation.

#### EXAMPLE

71.8 g 2-(3-(3-carboxy-5-hydroxy-1-(4-sulphophenyl)-pyrazol-4-yl-azo)-4-sulpho-anilino)-6-(N-methyl-8-sulpho-ethylamino)-4-fluoro-s-triazine stirred in 250 ml water, adjusted to pH 7.5 with soda soln., treated with 12.9 g nicotinic acid and reacted at 80-85°C and pH 7.5, giving 350

ml dyestuff soln. This was desalinated and conc. by pressure permeation, using a synthetic polymer membrane with a cut-off level of 1000. 180 g conc. dyestuff soln. were obtd. The soln. was treated with 2 g NaH<sub>2</sub>PO<sub>4</sub>, 2g Na<sub>2</sub>HPO<sub>4</sub> and 6 g ε-caprolactam and made up to 200 ml with deionised water. (18pp016MBDwgNo0/0).

(G) ISR: DE2634308 J61040367

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